Electronic Data Reporting

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U.S. Army Corps of Engineers
New England District

Why Electronic Submission?

- Consistency in reporting
- Facilitate data analyses
- Automated database entry
  - Bioaccumulation: risk assessment model
  - Sediment: DMSMART

Data Types Requiring Electronic Submission

- **Sediment – physical and chemical**
- **Water Column – elutriate**
- **Benthic Effects – bioaccumulation**

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Data types NOT Requiring Electronic Submission

- **Water Column – suspended particulates toxicity testing**

- **Benthic Effects – whole sediment toxicity testing**

Who Completes/Submits?

- **Applicant**
- **Agent**
- **Laboratory**
- **Coordination necessary!**

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Submittal Procedures

- **E-mail or mail on CD to NAE project manager**
- **State – status quo**

Obtaining Electronic Formats

- http://www.nae.usace.army.mil/reg/rim.htm

- Scroll down to “Data Reporting Requirements”
- Right-click on desired format
- Save Target As

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Elutriate

ELUTRIATE CHEMISTRY TESTING				
Gail's Marina				
NAE-2004-01				
Elutriate Analysis Results (mg/L)				
Sample Name	Arsenic	Cadmium	Chromium (VI)	Copper
C-1	5.3	0.1	100.1	15.9
C-2	2.5	0.05	45.7	35.7
C-3	13	0.2	26.9	113.3

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Bioaccumulation

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Sediment

- Electronic Data Deliverable (EDD)
- Excel workbook
- No longer in ASCII format
- Format finalized August 25, 2004
- Effective Oct 1, 2004
- Revised Oct 5, 2004

Format – 7 sheets

- EDD Info
- Project Info
- Sampling Info
- Composite Info
- Laboratory Results
- CAS Numbers
- Code Appendix

Field

Data

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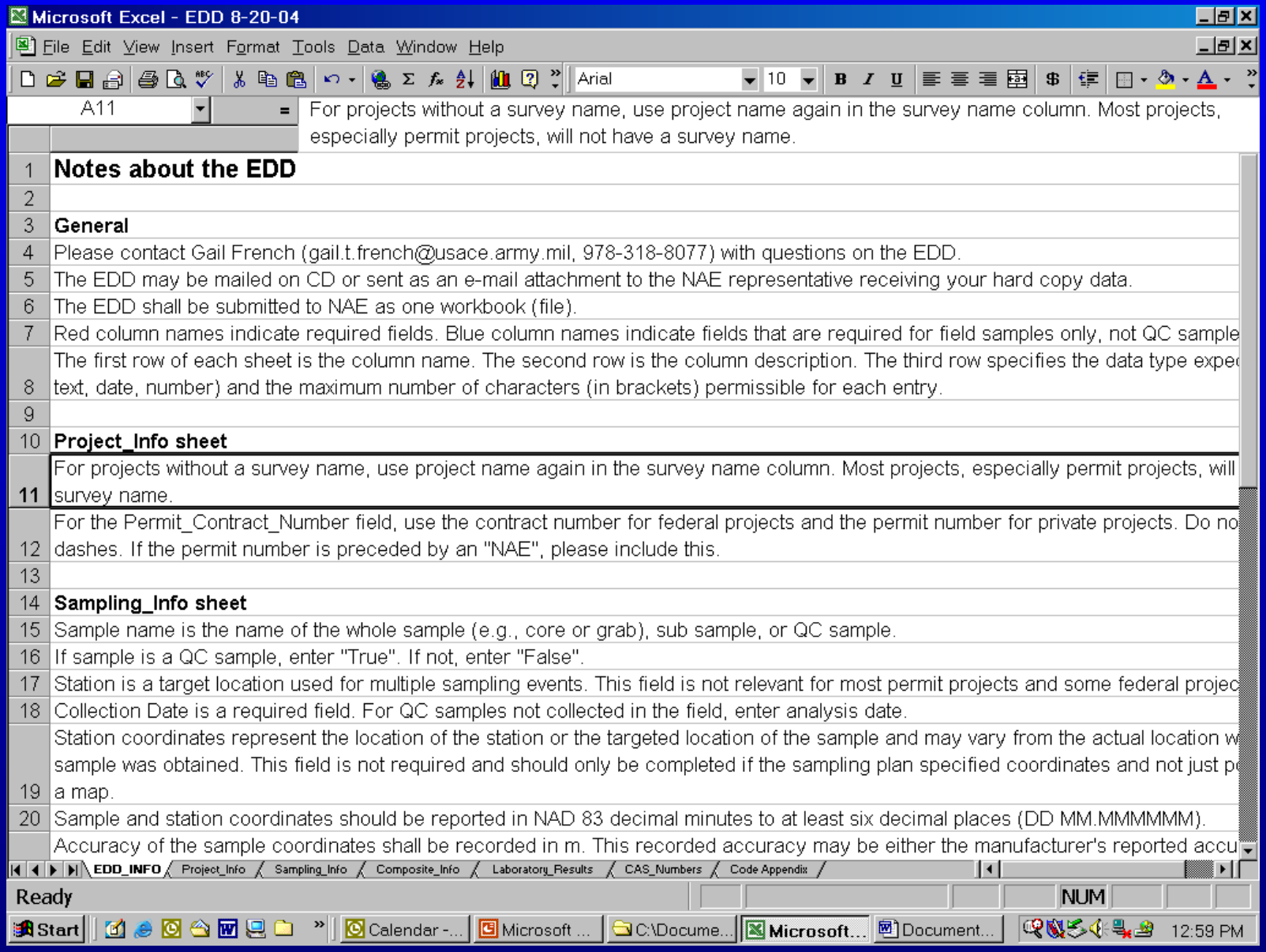
EDD Info


Microsoft Excel - EDD 8-20-04
File Edit View Insert Format Tools Data Window Help
Arial
10
A11
=
For projects without a survey name, use project name again in the survey name column. Most projects, especially permit projects, will not have a survey name.
1 Notes about the EDD
2
3 General
4 Please contact Gail French (gail.t.french@usace.army.mil, 978-318-8077) with questions on the EDD.
5 The EDD may be mailed on CD or sent as an e-mail attachment to the NAE representative receiving your hard copy data.
6 The EDD shall be submitted to NAE as one workbook (file).
7 Red column names indicate required fields. Blue column names indicate fields that are required for field samples only, not QC sample
8 The first row of each sheet is the column name. The second row is the column description. The third row specifies the data type expe
text, date, number) and the maximum number of characters (in brackets) permissible for each entry.
9
10 Project_Info sheet
11 For projects without a survey name, use project name again in the survey name column. Most projects, especially permit projects, will
survey name.
12 For the Permit_Contract_Number field, use the contract number for federal projects and the permit number for private projects. Do no
dashes. If the permit number is preceded by an "NAE", please include this.
13
14 Sampling_Info sheet
15 Sample name is the name of the whole sample (e.g., core or grab), sub sample, or QC sample.
16 If sample is a QC sample, enter "True". If not, enter "False".
17 Station is a target location used for multiple sampling events. This field is not relevant for most permit projects and some federal projec
18 Collection Date is a required field. For QC samples not collected in the field, enter analysis date.
19 Station coordinates represent the location of the station or the targeted location of the sample and may vary from the actual location w
sample was obtained. This field is not required and should only be completed if the sampling plan specified coordinates and not just p
a map.
20 Sample and station coordinates should be reported in NAD 83 decimal minutes to at least six decimal places (DD MM.MMMMMM).
Accuracy of the sample coordinates shall be recorded in m. This recorded accuracy may be either the manufacturer's reported accu
EDD_INFO
Project_Info
Sampling_Info
Composite_Info
Laboratory_Results
CAS_Numbers
Code Appendix
Ready
NUM
Start
Calendar -...
Microsoft ...
C:\Docume...
Microsoft...
Document...
12:59 PM

Worksheet Format

- **Row 1: field name**
- **Row 2: field description**
- **Row 3: field format – text, number, date, etc. – and max # char permissible**
- **Red indicates required field**
- **Blue indicates required for field-collected samples only, not for QC samples**

Today's Presentation

- **Required fields only**
- **All fields on handout**

Project Info

- Project_Name
- Survey_Name
- Collector
- Permit_Contract_Number
- Town
- State

Project Info (Ex)

- **Project_Name:** Gail's Marina
- **Survey_Name:** Gail's Marina
- **Collector:** French & Assoc.
- **Permit_Contract_Number:** NAE200401
- **Town:** Seaside
- **State:** MA

Sampling Info

- Sample_Name
- QC_Sample
- Collection_Date
- Sample_Y
- Sample_X
- GPS_Accuracy

Sampling Info (Ex)

- **Sample_Name:** S-1A
- **QC_Sample:** FALSE
- **Collection_Date:** 10/01/2004
- **Sample_Y:** 42 36.454545
- **Sample_X:** 71 52.676767
- **GPS_Accuracy:** 3

Sampling Info (cont.)

- Sample_Type_Code
- Sample_Purpose
- Core_Name
- Core_Length
- Core_Sample_Top
- Core_Sample_Bottom

Sampling Info (Ex)

- **Sample_Type_Code:** SC
- **Sample_Purpose:** REG
- **Core_Name:** S-1
- **Core_Length:** 300
- **Core_Sample_Top:** 0
- **Core_Sample_Bottom:** 150

Composite Info

- Composite_Name
- SubSample1
- SubSample2

...

Composite Info (Ex)

- **Composite_Name:** **C-1**
- **SubSample1:** **S-1A**
- **SubSample2:** **S-2B**

  … **S-3**

Laboratory Results

- Sample_Comp_Name
- Analysis_Date
- QC_Batch_Number
- Analyte_Type
- CAS_Number

Laboratory Results (Ex)

- **Sample_Comp_Name:** C-1
- **Analysis_Date:** 10/05/2004
- **QC_Batch_Number:** F49G711
- **Analyte_Type:** TRG
- **CAS_Number:** 7440439

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Laboratory Results (cont.)

- **Result**
- **Result_Qualifier**
- **Result_Qualifier_Desc**
- **Units_of_Measure**

Laboratory Results (Ex)

- **Result:** 0.05
- **Result_Qualifier:** J
- **Result_Qualifier_Desc**
- **Units_of_Measure:** mg/kg

Laboratory Results (cont.)

- Reporting_Limit
- Method_Detection_Limit
- Dilution_Factor
- Sample_Prep_Code
- Lab_Method

Laboratory Results (Ex)

- **Reporting_Limit:** 0.07
- **Method_Detection_Limit:** 0.01
- **Dilution_Factor:** 1
- **Sample_Prep_Code:** NORM
- **Lab_Method:** 3050B

QC Samples

- **Sampling Info – list all QC samples**
  - **Unique name**
  - **Reflect test (e.g., MatrixSpike1)**
  - **Sample Type Code: SQ**
- **Sample Name can be listed multiple times in Lab Results**

Sample Naming Scenarios

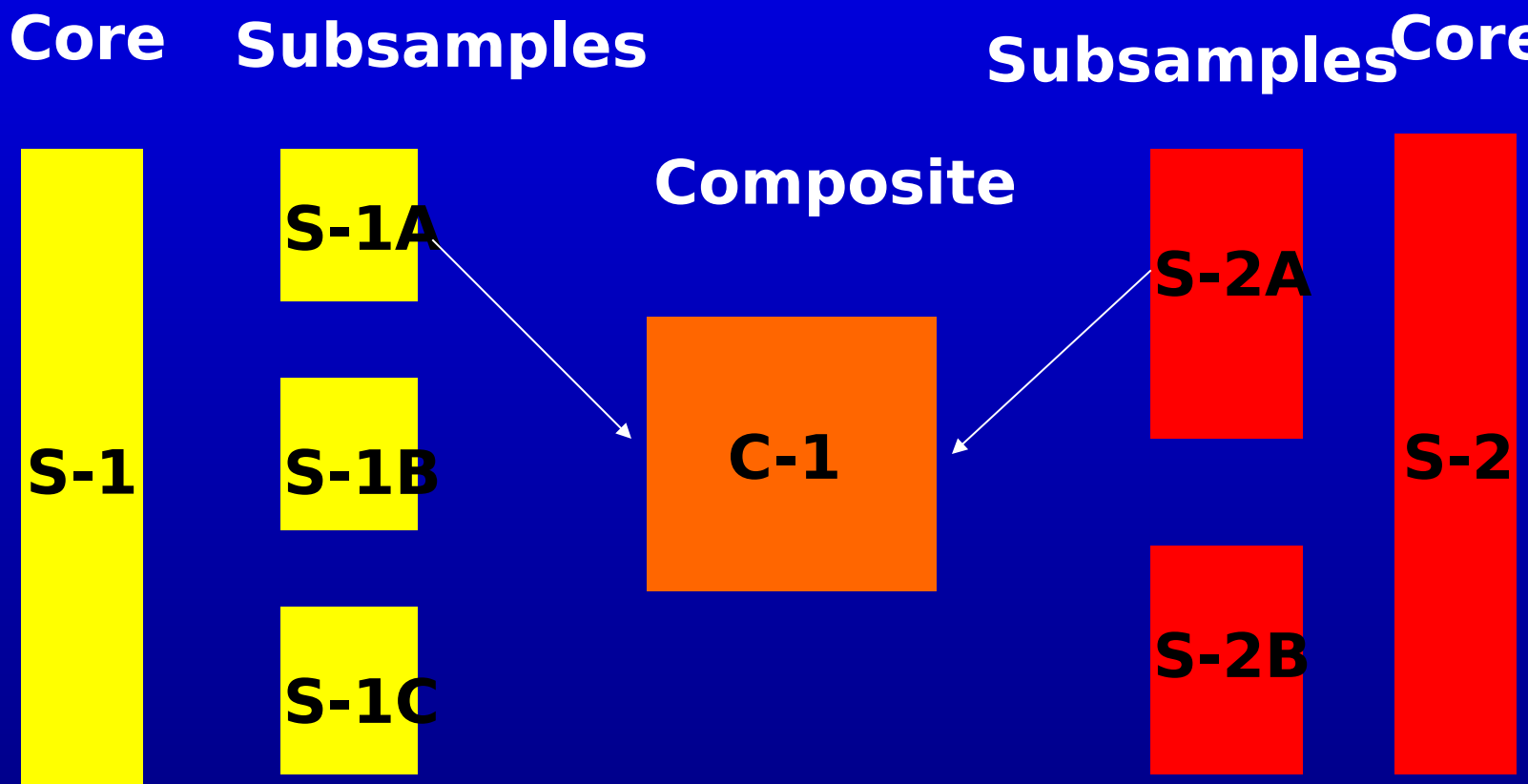
1) 4 cores, no stratification or compositing

2) 4 cores, with compositing

3) 4 cores, with stratification

4) 4 cores, with stratification and compositing

Sample Naming Scenarios



4 Cores, No Stratification or Composit

Sampling Info		Composite Info	Lab Results
Core	Sample	Composite Name	Sample Comp
S-1	S-1	→	S-1
S-2	S-2	→	S-2
S-3	S-3	→	S-3
S-4	S-4	→	S-4

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4 Cores, with Compositing

Sampling Info		Composite Info	Lab Results	
Core	Sample	Composite	Name	Sample
S-1	S-1	C-1	C-1	
S-2	S-2			
S-3	S-3			S-3
S-4	S-4			S-4

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4 Cores, with Stratification

Sampling Info		Composite Info	Lab Results
Core	Sample	Composite Name	Sample
S-1	S-1A	S-1A	
S-2	S-2A	S-2A	
S-1	S-1B	S-1B	
S-4	S-4	S-4	
S-1	S-1C	S-1C	
S-2	S-2B	S-2B	
S-3	S-3	S-3	

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4 Cores with Stratification and Compos

Sampling Info		Composite Info	Lab Results	
Core	Sample	Composite	Name	Sample
S-1	S-1A	C-1	C-1	
S-2	S-2A			
S-1	S-1B	C-2	C-2	
S-4	S-4			
S-1	S-1C	C-3	C-3	
S-2	S-2B			
S-3	S-3		S-3	

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"Readable, Printable" Data

- **Must submit easy-to-read format as well (same as previously)**
  - **Mailed as hard-copy or faxed**
  - **Or e-mailed as PDF, Word, Excel, etc. (must be easy to read and printer-friendly)**

Ex: "Readable, Printable" Data

Date Samples Received : 6/30/04
Date Samples Activated : 7/20/04

Client Name :	CTL Lab No. : 0604559
Report Date : 8/13/04	PO/ Job No. :

RESULTS OF ANALYSIS

Total Metals EPA Method 3050B

Matrix Type		**S**	**S**	**S**	**S**
CTL Sample #:		**11720**	**11721**	**11722**	**11723**
Field ID :		**#1**	**#2**	**#3**	**#4**
Parameters	**RL**				
Arsenic-mg/kg	0.4	5.3	6.1	4.9	6.2
Cadmium-mg/kg	0.1	0.94	0.77	0.78	0.70
Chromium, Total-mg/kg	0.5	3.86	35.2	28.4	28.8
Copper-mg/kg	0.5	280	151	76.2	125
Lead-mg/kg	0.5	39.6	58.6	23.6	32.6
Nickel-mg/kg	0.5	24.2	24.2	21.7	21.3
Mercury-mg/kg	0.02	0.18	0.19	0.41	0.15
Zinc-mg/kg	0.5	158	116	78.3	96.7

Complete Data Package

- Electronic data submission (if relevant)
- “Readable, printable” data
- QC Tables
- One data package per SAP (generally)

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Grain Size

- **Include QC Table with grain size data**
- **No EDD for grain size data**
- **Include grain size data in sediment chemistry EDD**

Questions?

- Contact me with e-data questions
- Coordination between Agent and Lab
- EDD completeness checker – coming soon!

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